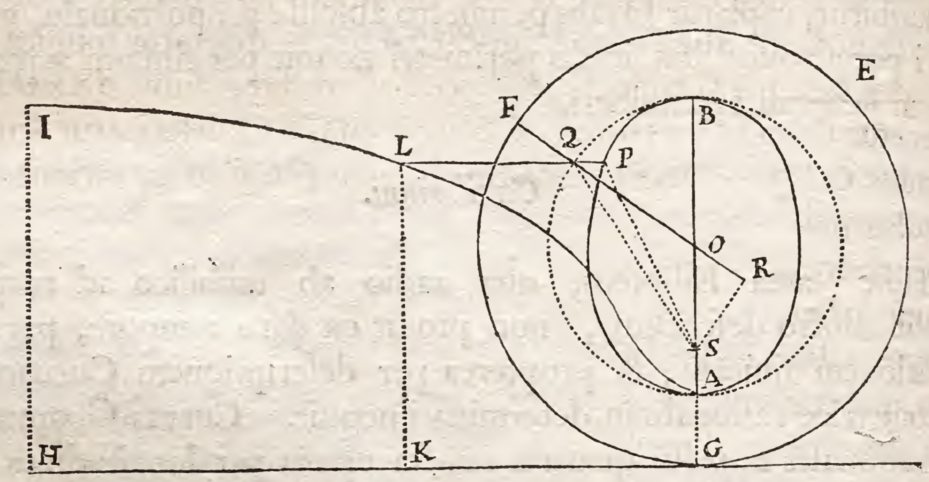
ad OA ut OA ad OS. Erige perpendiculum GH, centroq; O & intervallo OG deſcribe circulum EFG, & ſuper regula GH, ceu fundo, progrediatur rota GEF revolvendo circa axem ſuum, & interea puncto ſuo A deſcribendo Trochoidem ALI. Quo facto, cape GK in ratione ad rotæ perimetrum $GEFG$, ut eſt tempus quo corpus progrediendo ab A deſcripſit arcum AP, ad tempus

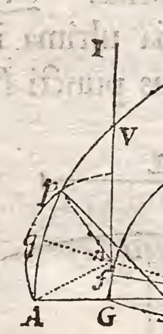


revolutionis unius in Ellipſi. Erigatur perpendiculum KL occurrens Trochoidi in L, & acta LP ipſi KG parallela occurret Ellipſi in corporis loco quæſito P.

Nam centro O, intervallo OA deſcribatur ſemicirculus AQB, & arcui AQ occurrat LP producta in Q, junganturq; SQ, OQ. Arcui EFG occurrat OQ in F, & in eandem OQ demittatur perpendiculum SR. Area APS eſt ut area AQS, id eſt, ut differentia inter ſectorem OQA & triangulum OQS, ſive ut differentia rectangulorum $\frac{1}{2} OQ \times AQ$ & $\frac{1}{2} OQ \times SR$, hoc eſt, ob datam $\frac{1}{2} OQ$, ut differentia inter arcum AQ & rectam SR, adeoq; (ob æqualitatem rationum SR ad ſinum arcus AQ, OS ad OA, OA ad OG, AQ ad GF, & diviſim $AQ - SR$ ad GF - ſin. arc. AQ) ut GK differentia inter arcum GF & ſinum arcus AQ. Q.E.D.

Scho-

Cæterum ob difficulta
conſtructiones vero proxi
lipſeos cujuſvis APB ſit
cus, OD ſemiaxis minor,
tur AS in G, ut ſit AG ad
L, quæ ſit ad $\frac{1}{2} GK$ ut e
Biſecetur OG in C, centr
circulus GFO. Deniq;
angulos quatuor rectos, quam habet tempus datum, quo corpus deſcripſit arcum quæſitum AP, ad tempus periodicum ſeu revolutionis unius in



Ellipſi: Ad AO demittat
verſus F ad uſq; N, ut ſit
ſinus EF ad radium CF;
circulus ſecabit Ellipſin in
Nam completo dimidi
reperietur in Apſide ſum
midio, redibit ad Apſide
ime abeſt ab Apſidibus
SP, GCF, & ratio ultin
eſt rationi Ellipſeos totiu